MIAMI-SOUTH FLORIDA
National Weather Service
Forecast Office
http://www.weather.gov/miami

Summer 2014 Weather Summary

Wetter and Warmer Than Normal Most Areas

September 4, 2014: Most of south Florida experienced rather typical summer conditions during the recently-concluded meteorological summer period of June through August. This means wet, warm and humid, with most locations not deviating too much from the average summer temperature and rainfall values.

Precipitation

Due to the lack of large-scale weather systems affecting south Florida this summer, rainfall across the area exhibited some variability between locations. In general, rainfall was near to about 5 inches above normal (Figure 1). A couple of locations were as much as 10 to 15 inches above normal, including the **second wettest summer on record at Miami International Airport** at over 13 inches above normal (see table below).

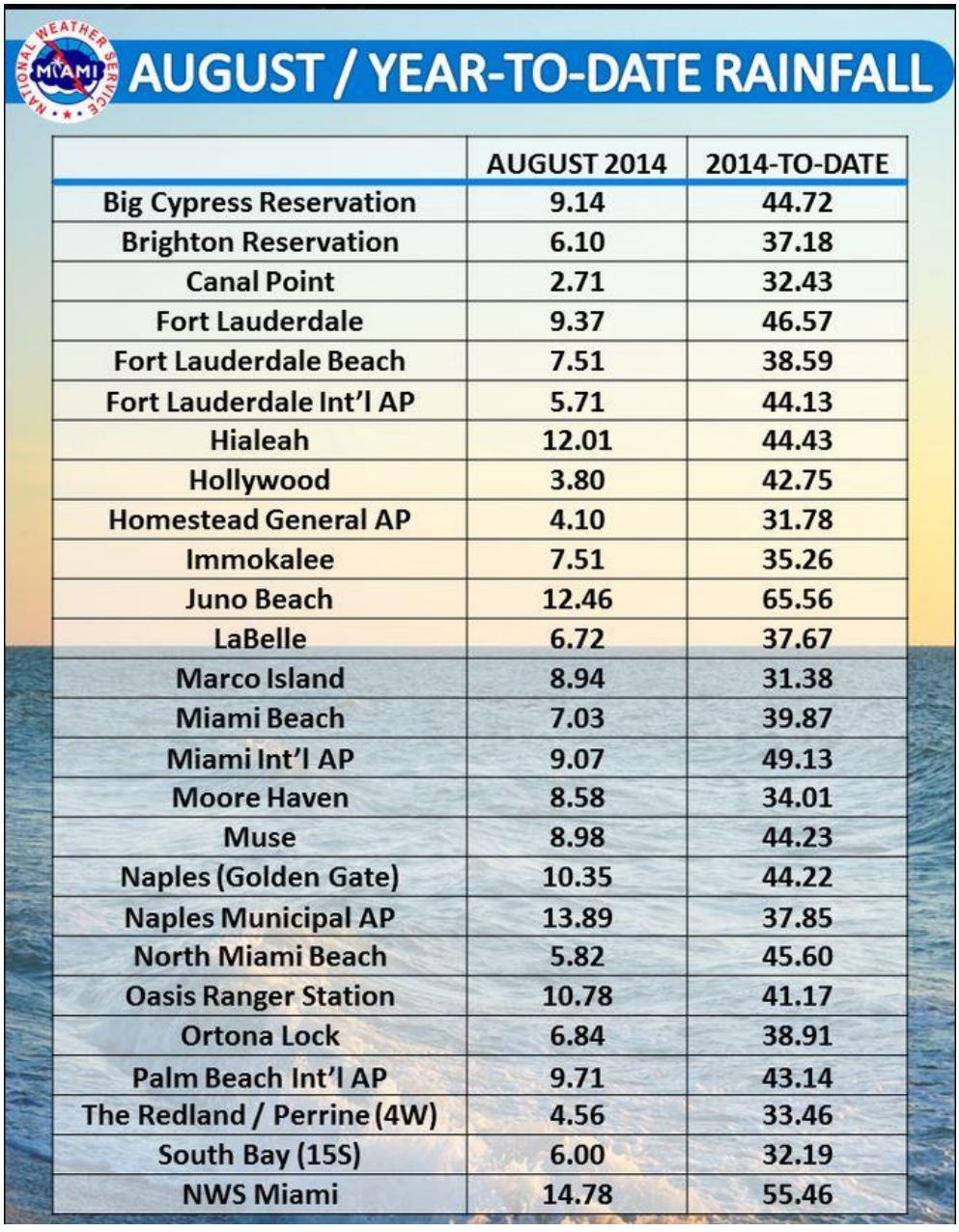
Areas of below normal precipitation were rather limited and confined to southern sections of Miami-Dade County, coastal sections of Broward County, the southern Everglades and just east of Lake Okeechobee in Palm Beach County. In these areas, rainfall was about 3-5 inches below normal for the summer.

Measures precipitation extremes across south Florida were: NWS Miami in Sweetwater recorded the most rainfall with 44.34 inches, followed by Miami International Airport at 38.98 inches. Canal Point in northwestern Palm Beach County recorded the least rainfall at 18.46 inches, followed by Pompano Beach Airpark at 18.63 inches. The average of all the reporting stations was 26.7 inches.

As is typical during the wet season, there were several episodes of urban/street flooding throughout the area. Probably the most significant rain/flood event occurred on August 4th in Naples where an August daily record rainfall of 6.73 inches was set at Naples

Municipal Airport. A band of very heavy rainfall associated with low pressure over North Florida set up from the Gulf of Mexico across the Naples area during the early afternoon. Rainfall amounts of 5-7 inches were measured in the cities of Naples and Golden Gate, most of this falling in a 2-3 hour time span. This lead to severe street flooding in these areas, with many vehicles stranded and water entering a few structures. The other impact resulting from the rainfall was lightning. A total of eight (8) people were reported to be injured by lightning strikes, along with several homes suffering damage from lightning-sparked fires

August, year-to-date and summer rainfall statistics (in inches) for select locations:



	AUGUST 2014	2014-TO-DATE
Big Cypress Reservation	9.14	44.72
Brighton Reservation	6.10	37.18
Canal Point	2.71	32.43
Fort Lauderdale	9.37	46.57
Fort Lauderdale Beach	7.51	38.59
Fort Lauderdale Int'l AP	5.71	44.13
Hialeah	12.01	44.43
Hollywood	3.80	42.75
Homestead General AP	4.10	31.78
Immokalee	7.51	35.26
Juno Beach	12.46	65.56
LaBelle	6.72	37.67
Marco Island	8.94	31.38
Miami Beach	7.03	39.87
Miami Int'l AP	9.07	49.13
Moore Haven	8.58	34.01
Muse	8.98	44.23
Naples (Golden Gate)	10.35	44.22
Naples Municipal AP	13.89	37.85
North Miami Beach	5.82	45.60
Oasis Ranger Station	10.78	41.17
Ortona Lock	6.84	38.91
Palm Beach Int'l AP	9.71	43.14
The Redland / Perrine (4W)	4.56	33.46
South Bay (15S)	6.00	32.19
NWS Miami	14.78	55.46

Location (Beginning of Period of Record)	Summer 2014 Rainfall	Departure from Normal	Summer Rank (Top 10)
Big Cypress - Hendry County	**29.63**	**+1.93**	
Brighton Seminole Campground	**25.92**	**+3.41**	
Canal Point (1941)	**18.46**	**-3.77**	
Ft Lauderdale/Hollywood Int'l Airport (1913)	**23.53**	**- 0.05**	
Fort Lauderdale Beach	**20.19**	**- 3.40**	
Fort Lauderdale Executive Apt	**24.14**		
Hialeah (1940)	**33.34**	**+5.01**	**10th Wettest**
Hollywood (1963)	**23.20**	**-1.53**	
Homestead General Airport (1990)	**19.87**	**-5.56**	
Immokalee (1970)	**19.64**	**-3.29**	
Juno Beach	**35.84**		
LaBelle (1929)	**22.87**	**-2.00**	
Marco Island	**22.01**		
Miami Beach (1927)	**23.35**	**+4.36**	
Miami International Airport (1911)	**38.98**	**+13.93**	**2nd Wettest**
Moore Haven (1918)	**21.76**	**- 0.46**	
Muse	**25.54**		
Naples East/Golden Gate	**30.69**		
Naples Municipal Airport (1942)	**29.02**	**+4.35**	
North Miami Beach	**32.14**		
NWS Miami – Sweetwater	**44.34**		
Oasis Ranger Station (1978)	**32.53**	**+4.46**	**7th Wettest**
Opa-Locka Airport	**27.25**		
Ortona	**23.76**	**-2.72**	
Palm Beach Gardens	**30.55**		
Palm Beach Int'l Airport (1888)	**25.42**	**+3.41**	
Pembroke Pines/North Perry Airport	**28.78**		
Pompano Beach Airpark	**18.63**		
Tamiami Airport – West Kendall	**31.26**		
The Redland - Miami-Dade County (1942)	**24.23**	**-2.34**	
South Bay/Okeelanta	**20.76**		

Temperatures

Summer temperatures ended up about one (1) degree above normal in most areas. Due to the low variability in day-to-day summer temperatures across South Florida, even small departures from normal can result in high all-time rankings, as illustrated in the individual station data below. Average temperatures increased from the lower 80s in June to the mid-80s in August, which is the normal trend. No observing station reached 100 degrees this summer, with the highest recorded values of 98 degrees observed at several interior locations in July and August.

- **Miami International Airport** had an average summer temperature of 83.5 degrees Fahrenheit. This is 0.7 degrees below the 30-year normal, but ranks as the 14th warmest summer on record. Miami observed 65 days of temperatures at or above 90 degrees this summer, which is well above the normal total of 39 days.

- **Palm Beach International Airport** had an average summer temperature of 82.8 degrees Fahrenheit. This is 1.1 degrees above the 30-year normal and ranks as the 20th warmest summer on record. West Palm Beach observed 59 days of temperatures at or above 90 degrees, which is well above the normal total of 41 days.

- **Fort Lauderdale/Hollywood International Airport** had an average summer temperature of 84.1 degrees Fahrenheit. This is 0.1 degrees above the 30-year normal, but ranks as the 5th warmest summer on record. Fort Lauderdale observed 65 days of temperatures at or above 90 degrees, greater than the normal July total of 44 days.

- **Naples Municipal Airport** had an average summer temperature of 83.0 degrees Fahrenheit. This is 0.7 degrees above the 30-year normal and ranks as the 12th warmest summer on record. Naples observed 63 days of temperatures at or above 90 degrees, just above the normal total of 61 days.

Outlook for September to November

Latest outlooks by the NOAA Climate Prediction Center (CPC, Figures 2 and 3) are for a slightly-enhanced likelihood of above-normal precipitation for the September to November period. This is the period in which south Florida transitions from the wet season to the dry season, with the median end of the rainy season around October 17th. Predicting this transition period well in advance is quite difficult, with some years

experiencing a quick transition of only a few days and others going through a gradual transition spanning a few weeks. This period can be largely influenced by tropical systems during what is typically the most active part of hurricane season.

The CPC outlook for September to November also calls for the likelihood of above normal temperatures in September transitioning to equal chances of above, below or near normal temperatures for October and November.

September and October represent the two most hurricane prone months for South Florida. Therefore, it is important that we continue to keep a close eye on the tropics and make sure that our personal hurricane plans are in place for this season.

For the latest south Florida weather information, including the latest watches, advisories and warnings, please visit the National Weather Service Miami Forecast Office's web site at weather.gov/southflorida.

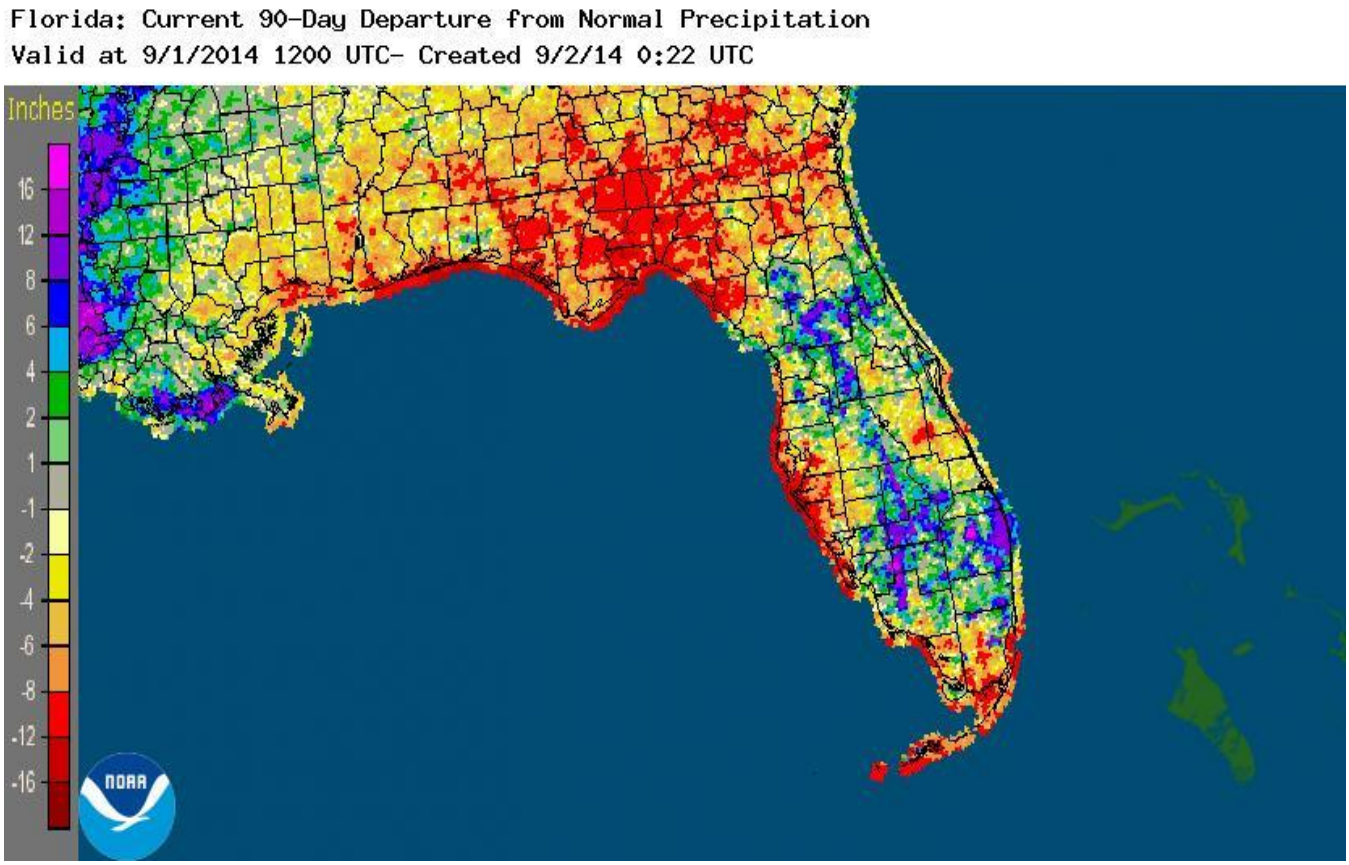
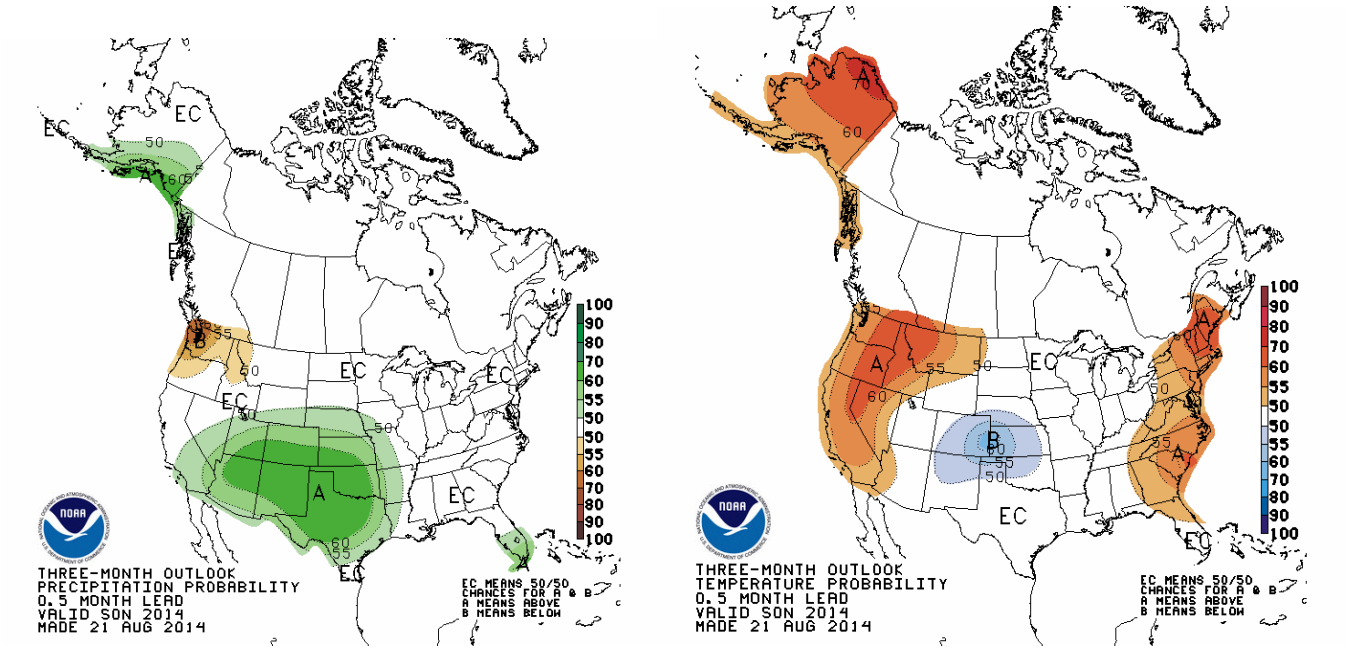


***Figure 1**: Summer 2014 precipitation departure from normal. Green and blue areas depict above normal summer rainfall, while yellow, orange and red areas depict areas of below normal rainfall.*



***Figures 2 and 3**: September-November precipitation probability (left) and temperature probability (right) from NOAA's Climate Prediction Center (CPC).*